

STUDIES IN THE EUPATORIEAE (ASTERACEAE). XLV.

A NEW GENUS, FLEISCHMANNIOPSIS.

R. M. King and H. Robinson
Smithsonian Institution, Washington, D.C. 20560.

Among the Mexican and Central American species superficially resembling Critonia, are three that are very distinct in a number of characters including their pappus and carpopodia. We apply the name Fleischmanniopsis to these species because of the marked resemblance of parts of the achene and corollas to those of Fleischmannia. The very distinct tapering, strongly rimmed carpopodia with thick walled cells are exactly like those found otherwise only in the genus Fleischmannia. The entirely slender usually slightly separated pappus setae are also alike in the two genera. The similarity in overall shape of the corolla further indicates the possibility of relationship. At this time, however, the question of relationship of Fleischmannia remains unresolved.

Some features of Fleischmanniopsis are certain at this time. The resemblance to Critonia is supported by such Critonioid features as smooth corolla lobes and a glabrous unenlarged style base. The genus is distinct from Critonia by the form of the carpopodium with its thick walled cells, by the slender pappus setae, by the veins of the corolla not reaching into the lobes, and by the reduced anther appendage. The genus is even more distinct from Fleischmannia by its smooth corolla lobes, short corolla veins, reduced anther appendages, less papillose style branches with clavate tips, fewer flowers per head and more imbricate phyllaries. Even the anther collars show some shorter more quadrate cells toward the base unlike the condition in Fleischmannia.

The short veins of the corollas of Fleischmanniopsis reach only to the sinusses between the lobes. This seems to be a reduced condition that is made possible by the small size of the flowers. Another genus showing this type of venation is Eupatorina (King & Robinson, 1971) of Hispaniola. There seems to be no close relationship between the genera.

Fleischmanniopsis R.M.King & H.Robinson, genus novum Asteracearum (Eupatorieae). Plantae herbaceae, erectae pauce ramosae. Folia opposita longe petiolata, laminis ovate lanceolatis serratis. Inflorescentiae paniculatae. Involucri squamae 15-20 valde inaequilongae 3-5 seriatæ; receptacula plana vel leniter convexa glabra. Flores 5-10 in capitulo; corollae

anguste infundibulares 5-lobatae, extus glabrae, cellulis oblongis vel linearibus, parietibus sinuosis, lobis aequilateraliter triangularibus ad apicem minute pauce papillois, stomatibus nullis, filis vascularibus infra lobes terminatis; filamenta antherarum alte inserta, in parte superiore angustata, cellulis rectangularibus vel inferne quadratis, parietibus nodulosis vel annulate ornatis, cellulis exothecialibus, plerumque subquadratis vel latioribus, appendicibus antherarum brevibus obtusis vel emarginatis; styli inferne glabri non nodulosi, appendicibus leniter vel abrupte clavatis inferne mamillosis superne sublaevibus. Achaenia prismatica 4-5-costata vix setifera; carpopodia valde distincta, cellulis quadratis parietibus crassis; pappus setiformis uniseriatus, setis 30-40 tenuis non vel vix contiguis scabris persistentibus, cellulis apicibus acutis.

Erect herbs. Leaves opposite, distinctly long petioled, blades ovate-lanceolate, usually serrate. Inflorescence a panicle. Involucre of 15-20 very unequal phyllaries; in 3-5 series; receptacle flat or slightly convex, glabrous, 5-10 flowers per head; corollas narrowly funnellform, 5-lobed, outer surface of corolla glabrous, cells oblong to linear with sinuous walls, lobes about as long as wide, with short papillae only at the tips; inner surface glabrous; stomates absent; veins of corolla reaching only to sinuses between lobes; anther collar slender, composed of rectangular or quadrate cells, walls with beaded or annulate thickenings; anther appendage small, sometimes emarginate, composed of large cells. Style base without enlarged node, glabrous. Styler appendage very much enlarged at the tips, mamilliose, lower parts of style branches short papilliose. Achenes prismatic, 4-5 ribbed, glabrous except for a very few setae, carpopodia very distinct, with upper rim, composed of several tiers of short thick-walled cells, pappus of 30-40 scabrous persistent setae in one series, apical cells acute.

Type species: Eupatorium leucocephalum Benth m

Our studies of the genus indicate that it contains the following three species.

Fleischmanniopsis leucocephala (Benth) R.M.King & H.Robinson, comb. nov. Eupatorium leucocephalum Benth, Pl. Hartw. 86. 1841. El Salvador, Guatemala, Honduras, Mexico.

Fleischmanniopsis mendax (Standley & Steyermark) R.M.King & H.Robinson, comb. nov. Eupatorium mendax Standley & Steyermark, Publ. Field Mus. Nat. Hist. Chicago, Bot. Ser. 23: 185. 1944. Guatemala.

Fleischmanniopsis nubigenoides (B.L.Robinson) R.M.King &
H.Robinson, comb. nov. Eupatorium nubigenoides B.L.Robinson,
Proc. Am. Acad. 54: 618. 1909. Guatemala.

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Reference

King, R.M. & H.Robinson 1971. Studies in the Eupatorieae (Aster-
aceae). XLII. A new genus, Eupatorina. Phytologia 21:
396-397.